



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,536	01/17/2001	Vinay Deo	M61.12-0684	8819

7590 06/15/2004

John A. Wiberg  
Westman, Champlin & Kelly  
International Centre, Suite 1600  
900 Second Avenue South  
Minneapolis, MN 55402-3319

EXAMINER

MCARDLE, JOSEPH M

ART UNIT	PAPER NUMBER
----------	--------------

2132

8

DATE MAILED: 06/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/764,536

Applicant(s)

DEO ET AL.

Examiner

Joseph McArdle

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 4-9-2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-22, 24-27 and 31-36 is/are rejected.
- 7) ☒ Claim(s) 23 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

Applicant's arguments were not persuasive in overcoming the grounds of rejection set forth in the previous office action. However, a new grounds of rejection is necessitated under 35 U.S.C. 101. The new grounds of rejection appear below. The delay in citation of the new grounds of rejection is regretted.

***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 20, 26, 27, and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 15 and 16 are directed towards a data structure that contains non-functional descriptive material. Descriptive material that cannot exhibit any functional interrelationship with the way in which computing processes are performed does not constitute a statutory process. See MPEP § 2106.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parkinson (6088457) in view of Barrett (5222137). In regards to claim 20, the Parkinson reference discloses a design in column 5, lines 11-19, and column 5, lines 40-47 in which a mobile

Art Unit: 2132

pager is communicated with through the use of a programming address which is stored within the memory of the pager itself. This disclosure meets the first limitation of claim 20, which calls for having address/address tag information indicative of an address over which a mobile device receives messages. Parkinson then discloses in column 5, lines 20-39 that in order for a pager to receive communications it must be enabled to do so. Parkinson further discloses that a window of time can be established upon enabling the communications channel such that messages can only be received within the established window of time. This meets the third and last limitations of claim 20, which call for having an expiration date indicative of and expiration date associated with the address along with a status portion indicative of the status of the address. Parkinson, however, makes no mention of having a key index portion indicative of a location where an encryption key associated with the received messages is stored. Barrett teaches in column 1, lines 30-43, that security concerns have lead to a push for allowing radio communication devices to contain multiple keys and/or algorithms. Barrett then discloses in column 4, lines 32-47, that an encryption key identifier, which is a number or other designation assigned to an encryption key, is used to select the appropriate encryption key and or algorithm (see lines 38-39) stored in the encryption circuitry. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Barrett's teachings into Parkinson's design in order to achieve a design that is capable of providing secure communications and also capable of having a key index indicative of a location where an encryption key associated with the received messages is stored.

Art Unit: 2132

5. In regards to claim 21, The Parkinson reference as described above in the rejection of claim 20 discloses how the status of the address can be either enabled or disabled. Parkinson further discloses in column 8, lines 23-37, the use of enabling/disabling functions that refer to whether a particular address is enabled. This meets the exact limitations set forth by claim 21.
6. In regards to claim 22, Parkinson further discloses, as described in the rejection of claim 20 above, that a window of time can be established in order to provide a time within which the messages must be processed. This meets the limitations set forth under claim 22.
7. In regards to claim 24, Parkinson further discloses in column 8, lines 29-30, that a character string, which is representative of a name, is used to identify an address. This meets the exact limitations set forth under claim 24.
8. In regards to claim 26, Parkinson and Barrett's design described above meets all of the aforementioned limitations of claim 20. Barrett further discloses a design in column 2, lines 4-15, that includes a radio receiver with a storage means, which is capable of receiving encrypted messages and decrypting them. Barrett then discloses in the aforementioned location that the storage means stores a plurality of encryption keys that are to be used in the decryption process. Barrett then discloses in column 4, lines 32-47, that an encryption key identifier, which is a number or other designation assigned to an encryption key, is used to select the appropriate encryption key and or algorithm (see lines 38-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Barrett's teachings on the use of encryption keys/algorithms into Parkinson's design in order to achieve a design that is capable of

Art Unit: 2132

having another data structure that stores all the encryption key/algorithm information in order to allow for secure communications.

9. Claims 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkinson (6088457) in view of Barrett (5222137). In regards to claims 27 and 31, Parkinson discloses in column 1, lines 17-28, that certain pagers can have group addresses that enables a single message to be sent by a carrier to multiple pagers at the same time. Parkinson also discloses that the use of group addresses helps to save carrier air time because every device programmed to the group address is able to receive the message. Parkinson then discloses a design in column 5, lines 11-19, and column 5, lines 40-47 in which a mobile pager is communicated with through the use of a programming address (group address), which is stored within the memory of the pager itself. This disclosure meets the first limitation of claims 27 and 31, which calls for having address/address tag information indicative of an address over which a mobile device receives messages. Parkinson then discloses in column 5, lines 20-39 that in order for a pager to receive communications it must be enabled to do so. Parkinson further discloses that a window of time can be established upon enabling the communications channel such that messages can only be received within the established window of time. This meets the third and last limitations of claims 27 and 31, which call for having an expiration date indicative of and expiration date associated with the address (group address) along with a status portion indicative of the status of the address (group address). Parkinson, however, makes no mention of having a key index portion indicative of a location where an encryption key associated with the received messages is stored. Barrett teaches in column 1, lines 30-43, that security concerns have lead to a

Art Unit: 2132

push for allowing radio communication devices to contain multiple keys and/or algorithms. Barrett then discloses in column 4, lines 32-47, that an encryption key identifier, which is a number or other designation assigned to an encryption key, is used to select the appropriate encryption key and or algorithm (see lines 38-39) stored in the encryption circuitry. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Barrett's teachings into Parkinson's design in order to achieve a design that is capable of providing secure communications and also capable of having a key index indicative of a location where an encryption key associated with the received messages is stored.

10. In regards to claim 32, Parkinson further discloses in column 8, lines 29-30, that a character string which is representative of a name used to identify an address (group address). This meets the exact limitations set forth under claim 32.

11. In regards to claims 35 and 36, Barrett further discloses a design in column 2, lines 4-15, that includes a radio receiver with a storage means, which is capable of receiving encrypted messages and decrypting them. Barrett further discloses in column 4, lines 32-47, that an encryption key identifier, which is a number or other designation assigned to an encryption key, is used to select the appropriate encryption key and or algorithm (see lines 38-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Barrett's teachings on storing a data structure on a radio receiver and being able to index into a location containing encryption keys into Parkinson's design in order to achieve a design that is capable of providing secure communications through the use of encryption and specifically through the use of a key index used to access encryption keys.

Art Unit: 2132

12. Claims 25, 33, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parkinson and Barrett as applied to claims 20 and 31 above, and further in view of Laflin. Parkinson and Barrett's design disclosed above meets all of the limitations set forth under claim 31. However, Parkinson and Barrett's design makes no mention of providing descriptive text that is indicative of the message received over the communications channel. Laflin discloses in column 1, lines 15-21, that call receivers (pagers) can receive messages sent by information services and that the messages can include information such as sports information or stock market information. Laflin further discloses in column 3, lines 13-16, that the header portion of a message contains information that describes the types of messages that are being received and stored on the pager. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Laflin's teachings on the use of descriptive names used to describe the messages being received into Parkinson and Barrett's design in order to achieve a design that is capable of providing an indication about what the subject matter of the message is.

13. In regards to claim 34, Parkinson and Barrett's design disclosed above meets all of the aforementioned limitations set forth by claim 31. However, Parkinson and Barrett's design makes no mention of service group codes having associated addresses, which are stored in locations according to the address and service group codes. Laflin discloses in column 4, lines 51-63, that messages are stored in a message memory on a pager according to categories that are representative of what type of message it is (what service group code it belongs to). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Laflin's teachings on storing



Art Unit: 2132

messages in a message memory into Parkinson and Barrett's design in order to achieve a design that is capable of storing messages according to service group codes and also make it easier to identify messages belonging to a particular service group code.

### ***Response to Arguments***

3. Applicant's arguments filed 4-9-2004 have been fully considered but they are not persuasive. The applicant argues that the expiration date (as set forth under claims 20 and 31), which is used to determine a point after which messages will be discarded, is in direct contrast to the functionality of the timer disclosed in the Parkinson reference. The examiner asserts that the window of time that is established through the use of a counter (Parkinson: column 5, lines 20-39), which enables a time period for which messages can be received, is indicative of the expiration date of claims 20 and 31 because the counter, serving as a means of determining when messages are allowed to be received, maintains the same functionality of the claimed expiration date that also indicates when messages can and can't be received.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph McArdle whose telephone number is (703) 305-7515. The examiner can normally be reached on Weekdays from 8:00 am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (703) 305-1830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

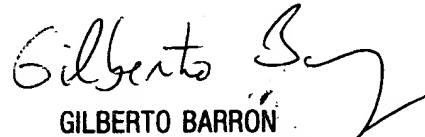
Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph McArdle  
Examiner  
Art Unit 2132

jmm



GILBERTO BARRON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100